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## **AMENDMENTS TO THE CLAIMS:**

1. (Currently amended) A lithium battery comprising:

a power-generating element comprising a positive electrode, a negative electrode and a separator, each of which comprises a gel electrolyte comprising:

a polymer comprising a polymerized polyfunctional (meth) acrylate monomer; and

a liquid electrolyte, a concentration of lithium salt in said liquid electrolyte being in a range from 2 to 4 mols per liter of the liquid electrolyte, said gel electrolyte comprising said polymerized polyfunctional (meth) acrylate monomer in a range from 5% to 30% by weight, based on a total weight of said polymer and said liquid electrolyte,

wherein said gel electrolyte in said separator <u>comprises a</u> is <u>different polyfunctional</u> (meth) acrylate monomer that is <u>different than said polyfunctional</u> (meth) acrylate monomer in than said gel electrolyte in said positive and negative electrodes.

- 2. (Currently amended) The lithium battery claimed in claim 1, wherein said gel electrolyte in at least one of said separator, said positive electrode and said negative electrode comprises said polymerized polyfunctional (meth) acrylate monomer in a range from 10% to 25% by weight, based on a total weight of said polymer and said liquid electrolyte.
- 3. (Previously presented) The lithium battery claimed in claim 1, wherein said polyfunctional (meth) acrylate monomer comprises one of a bifunctional (meth) acrylate, a trifunctional (meth) acrylate, and a tetrafunctional (meth) acrylate.
- 4. (Original) The lithium battery claimed in claim 1, wherein said lithium salt comprises LiBF<sub>4</sub>.
- 5. (Previously presented) The lithium battery claimed in claim 1, wherein said liquid

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electrolyte comprises an organic solvent comprising  $\gamma$ - butyrolactone in an amount of not smaller than 50% by weight.

- 6. (Previously presented) The lithium battery claimed in claim 2, wherein said polyfunctional (meth) acrylate monomer comprises a bifunctional (meth) acrylate monomer.
- 7. (Original) The lithium battery claimed in claim 2, wherein said lithium salt comprises LiBF<sub>4</sub>.
- 8. (Original) The lithium battery claimed in claim 3, wherein said lithium salt comprises LiBF<sub>4</sub>.
- 9. (Previously presented) The lithium battery claimed in claim 2, wherein said liquid electrolyte comprises an organic solvent comprising γ-butyrolactone in an amount of not smaller than 50% by weight.
- 10. (Previously presented) The lithium battery claimed in claim 3, wherein said liquid electrolyte comprises an organic solvent comprising  $\gamma$ -butyrolactone in an amount of not smaller than 50% by weight.
- 11. (Previously presented) The lithium battery claimed in claim 4, wherein said liquid electrolyte comprises an organic solvent comprising γ-butyrolactone in an amount of not smaller than 50% by weight.
- 12. (Previously presented) The lithium battery claimed in claim 1, wherein said liquid electrolyte comprises from 2 to 3 mols per liter of said lithium salt.
- 13. (Previously presented) The lithium battery claimed in claim 1, wherein said liquid

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electrolyte comprises a plurality of lithium salts.

- 14. (Previously presented) The lithium battery claimed in claim 1, wherein said liquid electrolyte comprises an organic solvent comprising at least one of  $\gamma$ -butyrolactone, propylene carbonate and ethylene carbonate.
- 15. (Previously presented) The lithium battery claimed in claim 1, wherein said lithium salt comprises an inorganic anion comprising at least one of PF<sub>6</sub>, ClO<sub>4</sub>, AsF<sub>6</sub>, and SCN.
- 16. (Previously presented) The lithium battery claimed in claim 1, wherein said lithium salt comprises an organic anion.
- 17. (Currently amended) The lithium battery claimed in claim 3, wherein said polyfunctional (meth) acrylate monomer comprises a bifunctional (meth) acrylate monomer.
- 18. (Previously presented) The lithium battery claimed in claim 1, wherein said polyfunctional (meth) acrylate monomer comprises a trifunctional (meth) acrylate monomer.
- 19. (Currently amended) A lithium battery comprising: positive and negative electrodes; and a separator formed between said positive and negative electrodes, wherein said positive electrode, said negative electrode and said separator each comprise a gel electrolyte comprising:
- a polymer comprising a polymerized polyfunctional (meth) acrylate monomer; and
- a liquid electrolyte comprising from 2 to 4 mols per liter of said lithium salt, said gel electrolyte comprising said polymerized polyfunctional (meth) acrylate monomer in a range from 5% to 30% by weight, based on a total weight of said polymer and said liquid electrolyte,

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wherein said gel electrolyte in said separator <u>comprises a is different polyfunctional</u> (meth) acrylate monomer that is different than said polyfunctional (meth) acrylate monomer in than said gel electrolyte in said positive and negative electrodes.

20. (Currently amended) A method of fabricating a lithium battery, said method comprising:

forming positive and negative electrodes; and

forming a separator between said positive and negative electrodes,

wherein said positive electrode, said negative electrode and said separator each comprise a gel electrolyte comprising:

a polymer comprising a polymerized polyfunctional (meth) acrylate monomer; and

a liquid electrolyte comprising from 2 to 4 mols per liter of said lithium salt, said gel electrolyte comprising said polymerized polyfunctional (meth) acrylate monomer in a range from 5% to 30% by weight, based on a total weight of said polymer and said liquid electrolyte, and

wherein said gel electrolyte in said separator <u>comprises a</u> is <u>different polyfunctional</u> (meth) acrylate monomer that is <u>different than said polyfunctional</u> (meth) acrylate monomer in than said gel electrolyte in said positive and negative electrodes.

- 21. (Currently amended) The lithium battery claimed in claim 20 +, wherein an amount of said polyfunctional (meth) acrylate monomer in said gel electrolyte of said positive and negative electrodes is different than an amount of said polyfunctional (meth) acrylate monomer in said gel electrolyte of said separator wherein said gel electrolyte in said positive and negative electrodes comprises a polymerized polyfunctional (meth) acrylate monomer which is different than said polymerized polyfunctional (meth) acrylate monomer in said gel electrolyte in said separator.
- 22. (Currently amended) The lithium battery claimed in claim 1 21, wherein an amount of

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said polymerized polyfunctional (meth) acrylate monomer in said gel electrolyte of said positive and negative electrodes is different than an amount of said polymerized polyfunctional (meth) acrylate monomer in said gel electrolyte of said separator.

- 23. (Currently amended) The lithium battery claimed in claim 22, wherein said positive electrode comprises a positive electrode active material sheet which comprising a pressed laminate, and wherein said pressed laminate of said positive electrode is vacuum impregnated with an electrolyte solution comprising a polyfunctional (meth) acrylate monomer which is polymerized to form said polymerized polyfunctional (meth) acrylate monomer of said positive electrode.
- 24. (Currently amended) The lithium battery claimed in claim 23, wherein said pressed laminate in said positive electrode active material sheet comprises a positive electrode current collector and press laminated with a positive composite material.
- 25. (Previously presented) The lithium battery claimed in claim 24, wherein said positive composite material comprises one of LiCoO<sub>2</sub>, LiNiO<sub>2</sub>, LiMn<sub>2</sub>O<sub>4</sub>, lithium titanium oxide, a vanadium oxide-based material and iron phosphate-based material.
- 26. (Currently amended) The lithium battery claimed in claim 25, wherein said negative electrode comprises a negative electrode active material sheet which comprising a pressed laminate, and wherein said pressed laminate of said negative electrode is vacuum impregnated with said electrolyte solution comprising said polyfunctional (meth) acrylate monomer which is polymerized to form said polymerized polyfunctional (meth) acrylate monomer of said negative electrode.
- 27. (Currently amended) The lithium battery claimed in claim 26, wherein said pressed laminate in said negative electrode active material sheet comprises a negative electrode current

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collector and press laminated with a negative composite material.

- 28. (Previously presented) The lithium battery claimed in claim 27, wherein said negative composite material comprises one of lithium metal, lithium alloy and a carbon-based compound.
- 29. (Previously presented) The lithium battery claimed in claim 28, further comprising: an aluminum laminate film covering said power-generating element and being heat-fused to formed said lithium battery.